



Legislation Creates Clark County Regional Flood Control District

Full Mitigation Best Practice Story

Clark County, Nevada

Las Vegas, NV - With an estimated 5,000 new residents arriving each month, Las Vegas and its surrounding area is the fastest growing community in the western United States. More than 1.2 million people live in the area, which lies at the center of a desert valley bounded by mountain ranges. Creeks and riverbeds connect in the center of the valley near the heart of the city. The arid desert soil absorbs little water. As development spreads, there are fewer areas where water may naturally flow or gather.



Because of the terrain, the Las Vegas area is prone to flash floods. The area experiences several minor floods each year. Half an inch of rain in a day is enough to flood downtown streets. Water flows downhill from west to east. Regular flooding results in structural damage to businesses and residences, and serves as the catalyst for car accidents.

In 1984, El Nino-generated storms ravaged the Las Vegas area. Seven persons died in storms that year. More than \$27 million in property damage occurred. Twenty-four persons died in nine flash floods since 1990, and eight other floods have resulted in more than \$1 million in damage.

The Nevada Legislature responded in 1986 by creating the Clark County Regional Flood Control District. It embarked on one of the most progressive self-funded flood control programs in the country. The district is funded by a .25 percent sales tax. It raises revenue of more than \$45 million annually. Since its program began more than a decade ago, it has spent nearly \$350 million on structural mitigation projects throughout the Las Vegas area. Current master plans call for further mitigation expenditures of \$1.2 billion over the next 30 years.

Thus far, the Clark County Regional Flood Control District has constructed more than 60 miles of flood control channels plus 20 retention basins that manage up to 80 million gallons of water. In addition, the flood control district has contributed more than \$8 million toward the county's purchase of easements and rights-of-way.

The region also receives Federal funding. It is initiating several other mitigation projects throughout the southern half of the state. According to the Las Vegas Sun, Congress contributed \$10 million to related flood control projects in 1996. Congress will contribute another \$23 million in 1999 for work on the Tropicana and Flamingo washes (seasonal watercourses in arid areas), and \$300,000 to help protect the Las Vegas wash.

The exact cost benefit ratio of these projects is currently being independently studied and will be released later this year to the state legislature, according to Kevin Eubanks, a Clark County engineer.

However, Eubanks and residents say tangible benefits have already been demonstrated. A number of buildings and other structures that would have been flooded before mitigation was done were not damaged in the recent flooding. Eubanks said this flooding could have been much worse and much more costly if it were not for the massive mitigation effort already done. Also, costs of flood insurance for property owners were reduced substantially.

[See "Clark County Regional Flood Control District Projects Prove Successful" for an update following the devastating flash flood of July 1999.]

Activity/Project Location

Geographical Area: **Single County in a State**

FEMA Region: **Region IX**

State: **Nevada**

County: **Clark County**

Key Activity/Project Information

Sector: **Public**

Hazard Type: **Flooding**

Activity/Project Type: **Land Use/Planning**

Activity/Project Start Date: **01/1986**

Activity/Project End Date: **Ongoing**

Funding Source: **State sources**

Funding Recipient: **Local Government**

Funding Recipient Name: **Clark County Regional Flood Control District**

Activity/Project Economic Analysis

Cost: **\$1,200,000,000.00 (Estimated)**

Activity/Project Disaster Information

Mitigation Resulted From Federal
Disaster? **Unknown**

Value Tested By Disaster? **Yes**

Tested By Federal Disaster #: **No Federal Disaster specified**

Year First Tested: **1999**

Repetitive Loss Property? **No**

Reference URLs

Reference URL 1: **<http://www.ccrfcd.com>**

Reference URL 2: **<http://www.floodsmart.gov/>**

Main Points

- With an estimated 5,000 new residents arriving each month, Las Vegas and its surrounding area is the fastest growing community in the western United States.
- Because of the terrain, the Las Vegas area is prone to flash floods. The area experiences several minor floods each year. Half an inch of rain in a day is enough to flood downtown streets.
- Severe storms over the years had claimed many lives and cost millions of dollars in property damages.
- The Nevada Legislature responded in 1986 by creating the Clark County Regional Flood Control District. It embarked on one of the most progressive self-funded flood control programs in the country.
- The district is funded by a .25 percent sales tax.
- The district has constructed more than 60 miles of flood control channels, 20 retention basins and multiple additional projects that protect the city and residents from flooding.